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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/581,847 06/19/00 SANDER

R MERCK-2114

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EXAMINER

PAK, J

ART UNIT

PAPER NUMBER

1616

DATE MAILED:

09/04/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/581,847

Applicant(s)

SANDER

Examiner

PAK, J.

Group Art Unit

1616

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 5/22/01
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 18-31 is/are pending in the application.
- Of the above claim(s) — is/are withdrawn from consideration.
- ☐ Claim(s) — is/are allowed.
- ☒ Claim(s) 18-22 and 24-31 is/are rejected.
- ☒ Claim(s) 23 is/are objected to.
- ☐ Claim(s) — are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on — is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on — is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) —
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: —

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). —
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other —

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Claims 18-31 are pending in this application.

Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 22 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 22 and 29, the following claim language is unclear: "mica coated with both  $\text{TiO}_2$  and graphite and BiOCI." First, if "BiOCI" is supposed to be the last member of the Markush group, a comma after "graphite" would be helpful since there are several instances of "and" near there. Second, BiOCI (with a capitalized letter I) appears to be a typographical error for "BiOCl" (with a lower case letter l). BiOCl is bismuth oxychloride, a recognized substance, whereas BiOCI does not appear to be a recognized substance in this field.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 18-21, 24-28 and 31 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Marco.

Marco explicitly discloses applying whitewashes of reflective materials directly onto growing potato plants (p. 1344, last sentence of the paragraph bridging left and right columns; p. 1345, left column, lines 6-9). Whitewashes contain inert reflective materials and an ingredient to increase stickiness (p. 1344, right column, see under "MATERIALS AND METHODS"). Weekly sprays with reflective whitewash materials reduced potato leaf roll virus and potato virus Y (see pp. 1345-1347). Reduced landing of aphids because of increased leaf reflectivity is disclosed (see e.g., p. 1347, left column, "DISCUSSION").

The claims are thereby anticipated, or at the very least rendered obvious within the meaning of section 103(a) because every element of the claimed invention is explicitly disclosed by the cited reference.

Claims 18-21 and 24-28 are rejected under 35 U.S.C. 102(b) as anticipated by JP 60-149508.

JP 60-149508 explicitly discloses spraying to citrus trees and their leaves an aqueous dispersion that contains white fine powder of a mineral such as kaolin, talc, titanium oxide, etc. and a spreader such as vinyl acetate resin or PVA. See the entire document; applicant has submitted an English abstract, Patent Abstracts of Japan, in his IDS of 8/18/2000 (see Reference "AU"). The spreader helps to maintain the white mineral fine powder on the surface of the leaf and retain its insect repelling effect (*id.*).

Applicant's claims are thereby clearly anticipated by JP 60-149508.

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Claims 25-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Letteron (US 3,099,897).

Letteron explicitly discloses an agriculturally useful 2-7% slurry of mica flakes in water (column 2, lines 42-43; sentence bridging columns 2 and 3).

While Letteron does not explicitly disclose the property of protecting plants from insects and insect-transmitted plant viruses, Letteron's composition is seen to necessarily possess such property because applicant's composition in claims 25-25 is directly readable on Letteron's composition – the ingredients required in applicant's composition are the same as those disclosed in Letteron's composition, and as a result the two compositions must have the same properties by virtue of their containing the same ingredients. Therefore, no difference in property can exist since the scope of applicant's claimed composition reaches to the composition explicitly disclosed by Letteron.

Consequently, claims 25-27 are anticipated, or at the very least rendered obvious within the meaning of section 103(a). In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Claims 25-27 and 29-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ambrosius et al. (US 4,867,794).

Ambrosius et al. explicitly disclose a suspension in water that contains mica particles coated with  $\text{TiO}_2$  and  $\text{SnO}_2$ . See column 3, lines 17-19; Examples 1-8 on columns 3-4.

While Ambrosius et al. do not explicitly disclose their water suspension of coated mica particles as being useful for applying to surfaces of growing plants, there is nothing about their water suspension that indicates that it would not be so suitable. The reaction mixture that applies the coating is separated from the coated particles and the particles are washed with water – hence, the mica particles that are coated with  $\text{TiO}_2$  and  $\text{SnO}_2$  are suspended in water, and it is the

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disclosure of this suspension that anticipates the claimed compositions. Even though Ambrosius et al. did not disclose that their wash suspension had the property of protecting plants from insects or insect-transmitted viruses, Ambrosius et al. nonetheless explicitly disclosed the composition per se, and such plant protecting property would have been necessarily present in Ambrosius' composition since it contains the same exact composition ingredients as that of the claimed composition. At the very least the claimed invention is rendered obvious within the meaning of section 103(a) because the same exact composition ingredients are contained in the aqueous suspension disclosed by Ambrosius et al. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Claims 25-27 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Duschek et al. (US 5,472,491).

Duschek et al. explicitly disclose a suspension in demineralized water that contains mica particles coated with TiO<sub>2</sub> (Iriodin 225). See e.g., column 8, lines 48-50.

While Duschek et al. do not explicitly disclose their water suspension of coated mica particles as being useful for applying to surfaces of growing plants, there is nothing about their water suspension that indicates that it would not be so suitable. Even though Duschek et al. did not disclose that their suspension had the property of protecting plants from insects or insect-transmitted viruses, Duschek et al. nonetheless explicitly disclosed the composition per se, and such plant protecting property would have been necessarily present in Duschek's composition since it contains the same exact composition ingredients as that of the claimed composition. At the very least the claimed invention is rendered obvious within the meaning of section 103(a) because the same exact composition ingredients are contained in the aqueous suspension disclosed by Duschek et al. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

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Claims 18 and 25 are rejected under 35 U.S.C. 102(b) as anticipated by GB 2,098,247.

GB 2,098,247 explicitly discloses a net with a metallized reflective coating that can be placed directly over growing crops to protect them from insects (see page 1, lines 9-23, claims 1 and 4).

While applicant may argue that his invention is not directed to a net, it is the Examiner's position that claims 18 and 25 are ~~broadly~~<sup>broadly</sup> written enough to read on the net disclosed by GB 2,098,247. Since such a net has been disclosed to be placed directly over growing crops to protect the crops from insect attack, instant claims 18 and 25 are anticipated.

A facsimile center has been established in Technology Center 1600. The telecopier numbers for accessing the facsimile machines are (703)308-4556 or (703)305-3592.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Pak, whose telephone number is (703)308-4538. The Examiner can normally be reached on Monday through Friday from 7:00 AM to 3:30 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Jose Dees, can be reached on (703)308-4628. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703)308-1235.

  
JOHN PAK  
PRIMARY EXAMINER  
GROUP 1600